Explosives Safety Siting (ESS) Software

Overview and Army Deployment

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Report Documentation Page

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- **Agenda**
  - Partnerships
  - Purpose
  - Benefits
  - ESS Toolkit
  - ESS Planner
  - Army Direction
  - Return on Investment

- **Partnerships**
  - Department of Defense Explosives Safety Board (DDESB)
    - Software development
  - Naval Facilities Engineering Support Center (NAVFAC ESC)
    - Collect data, create installation database, provide training, ESS help desk
  - Commands
    - Provide data and maintain data
    - Submit site plans
  - Army Mapper
    - Army ESS Repository

- **ESS Software Purpose**

  – Automate site plan process

  – Calculate and display Explosives Safety Quantity Distance (ESQD) arcs

- **ESS Benefits**
  - Analyze one or several Potential Explosion Sites (PES) within minutes
  - Elimination of "math" errors in measurements and calculations
  - More accurate/complete submittal packages
  - Reduce time to create submittal packages

- **ESS Software**
  - Toolkit
    - Data Requirements
  - ESS Planner
    - Analysis Tools

- **ESS Tool Kit**

  — Used to import and configure data

  — Links three existing datasets from an installation

    1. Geospatial Information System (GIS)

    2. Real Property Inventory (RPI)

    3. Potential Explosion Site (PES)

- **ESS Site Planner**
  - QD Analysis
  - Site Plan Submittal Package
  - Master Plan Constraints (ESQD Arcs)
  - Mitigation – dealing with violations
  - Consequences – What happens if an explosion occurs?

- **Site Plan Submittal Packages**
  - Cover letter
  - Enclosures
    - QD worksheet (PES/ES info)
    - QD maps
  - Electronic submittal and review

- **Army Deployment**
  - Phase I: deployed to 17 installations. Completed Apr 10
  - Phase II: deploying to 50 sites. Due to be completed Sep 11

- **Army Deployment Process**
  - Identify and prioritize installations
  - Provide web-cast overview to POCs
  - Collect data sets (PES/RPI/GIS)
  - Create database
  - Cleanse data
  - Run software
  - Eliminate violations
  - Train users

- **ESS Return on Investment**

  – DOD standard data

  – Thorough, in-depth analysis

  – Greatly enhanced "what-if" analysis capability

  – Identification of unknown violations

  – Optimized explosives storage capacity

- **Summary**
  - Partnerships
  - Purpose
  - Benefits
  - ESS Toolkit
  - ESS Planner
  - Army Direction
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